

ABSTRACT

A composite antenna device includes a ground board, an unbalanced antenna, a balanced antenna. The unbalanced antenna includes a first feeding point coupled with the ground board, a first radiator having a second end and a first end connected with the first feeding point, and a load conductor connected with the second end. The balanced antenna includes a second feeding point, a second radiator connected with the second feeding point, and a third radiator connected with the second feeding point. The load conductor has a shape symmetrical about a straight line which passes through the first feeding point and which is perpendicular to the ground board. The second radiator and the third radiator are placed at positions symmetrical to each other about the straight line, respectively, and have shapes symmetrical to each other about the straight line. The composite antenna has a large isolation between the unbalanced antenna and the balanced antenna, accordingly having a small size.